



The [solution](#) for water shortages

BASIN SUMP PUMP KIT (BSP) INSTALLATION NOTES

Greywater Recycling

The BSP kit is required when the bath fixture drains being routed to the Brac System are below the level of the greywater inlet of the Brac System. Fixtures that lie above the inlet of the Brac System can be drained directly to the Brac System, converging with the BSP outflow pipe before entering the Brac System. As with the Brac System itself, this kit should only be installed by a qualified plumber.

Planning and preparation

The kit should be installed so that the top of the basin tank lies flush with the floor, and the inlet/overflow pipes being above the level of the main sanitary drain of the building with enough room to place a backflow device immediately downstream of the basin. In new construction, the basin should be in place with all the pipes connected, prior to the foundation slab being poured. Existing construction will present a number of difficulties in connecting the overflow to the sewer and generally require a larger hole to provide workspace to connect the pipes. The access lid to the basin must remain accessible for maintenance. Pipes exiting the lid of the basin should be plumb for several feet allowing the lid to freely move up the pipes for maintenance and possible removal of the sump pump. Before installing the plumbing through the lid, be sure that everything will align properly, so that the bolt holes in the lid will align with the nuts in the basin lip after the pipes are installed.

Care must be taken to correctly identify the inlet of the basin versus the outlet. The inlet opening is slightly higher than the outlet and can be verified by measuring from the bottom of the basin to the bottom of the inlet/outlet opening. Standard Plumbing Codes will permit a maximum of four (4) tubs/showers to be drained through the 2" inlet port of the sump basin. The pump is operated by a vertical float mechanism and the operation of the float can be impeded by the incoming greywater stream, so it is important that the pump be oriented in the basin so that the float is on the side toward the overflow. If the basin's vertical outflow pipe is kept to the minimum height to allow proper draining into the Brac System, then BRAC SYSTEMS does not generally recommend a check valve be installed as recommended in the BURKE sump basin manual. Greywater trapped in the outflow pipe should be allowed to drain back into the basin when the pump shuts off. In some cases, where the BSP kit cannot be located near the Brac System, a check valve may be necessary to avoid the constant and indefinite cycling on and off of the pump.

- Connect the drains of the fixtures being served by the BSP kit to the inlet using piping sized in accordance with local plumbing codes.
- Connect the overflow pipe to the building's sanitary drain and install a backwater valve immediately downstream of the basin.
- Position the pump in the basin so that the float is toward the overflow and away from the inlet port of the basin.
- Connect the outflow pipe to the sump pump, through the lid, and to the greywater inlet of the Brac System.

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- Connect the outflow pipe to the sump pump, through the lid, and to the greywater inlet of the Brac System.
- Connect a vent pipe through the second hole in the basin lid in accordance with local plumbing codes.
- Remove plastic flange adjacent to the electrical wire hole in the basin lid, route the electrical wire through the hole then reinstall the flange.
- Apply the provided foam tape to the sealing surface between the basin and the lid.
- Slide the lid down the vent and outlet pipes and align the bolt holes, then bolt down lid.
- Access lid must remain accessible after installation.
- Plug the pump into a GFI-protected outlet and test the pump by running water down the drain of a connected fixture.

IMPORTANT!

Be sure to position the sump pump's float on the opposite side of the tank as the inflow port. Inflowing water could interfere with the operation of the float if positioned below the incoming greywater stream.

